

Notice of Allowability	Application No.	Applicant(s)
	10/743,917	SCHLEIER-SMITH, JOHANN M.
	Examiner	Art Unit
	Michelle A Lazor	1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the marked up copy of claims received 5/19/04.
2. The allowed claim(s) is/are 17-24.
3. The drawings filed on 24 December 2003 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Klein on 6/2/04.

The application has been amended as follows:

17. A method for robotic manipulation of a plurality of objects comprising the steps of:
 - a. providing a container;
 - b. providing at least two fluid layers in said container, at least one of said fluid layers being formed by a liquid;
 - c. adding said objects to be manipulated to said container, said objects being disposed adjacent an interface between said liquid layer and said other fluid layer adjacent to said liquid layer;
 - d. agitating said liquid with energy having a predetermined first waveform to generate a first standing wave pattern therewith at said interface, said standing wave pattern of liquid dynamically arranging said objects; and,
 - e. positioning a substrate in said container, said substrate being adapted for adhesion of said objects thereto.

2. The following is an examiner's statement of reasons for allowance: Wissner-Gross (U.S. Patent No. 6216631) discloses a method providing a container, providing at least a pair of fluid layers disposed in said container, at least one of said fluid layers being formed by a liquid (column 7, lines 6 – 12 and column 9, lines 37 – 47), objects being disposed adjacent an interface between said pair fluid layers; and positioning a substrate in said container, said substrate being adapted for adhesion of said objects thereto (column 1, line 66 – column 2, line 24); however there was no reference in the prior art search that disclosed, taught, or suggested agitating said *liquid* (rather than particulates) with energy having a predetermined first waveform to generate a first standing wave pattern therewith *at said interface*, as claimed. Parks (U.S. Patent No. 3663896) discloses using ultrasonic sound waves to establish standing waves in two immiscible liquids (Abstract; column 1, line 73 – column 2, line 19), nevertheless there is no mention of where specifically the standing waves are formed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 571-272-1232. The examiner can normally be reached on Mon - Wed 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yvette K. Ward Jr.
MAL
6/2/04

R. Crispino
RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700